

AMENDMENT UNDER 37 C.F.R. § 1.111
U. S. Application No. 09/497,520

REMARKS

Claims 1-22, 24-27, and 29-50 are all the claims pending in the application.

Claims 1, 2, 19, 22, 38, 39, 44, 45, and 50 are rejected under 35 U.S.C. § 102(b) as being anticipated by Young (US 5,473,736).

Claims 3-18, 24-27, 29-37, 40-43, and 46-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the rejected base claims and any intervening claims.

Claims 20 and 21 are not discussed in the Office Action. Since these claims are not dealt with in the current Office Action, any subsequent rejections must be made on a non-final basis.

Applicant traverses the claim rejection with the following comments.

The present invention relates to a color image processing method, which is a pre-processing method required for retrieving a color feature descriptor used in indexing and searching a color image.

Young relates to preserving natural features of an image of real two-dimensional or three-dimensional objects while controlling the colorization of the image, either from gray-scale images to color or from colors of one palette to colors of another palette.

Claim 1 recites grouping sorted pixels into groups in which a difference in intragroup color distance is minimum and a difference in intergroup color distance is maximum. Applicant submits that Young fails to teach or suggest this feature of the claim.

As a preliminary matter, Applicant notes that the Examiner cites col. 9, lines 30-35 as allegedly disclosing the portion of claim 1 which recites sorting image pixels according to a color distance between image pixels and a central pixel. However, the cited portion of the

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reference actually discloses a calculation of distances, rather than a sorting of pixels based on distances.

The Examiner points to col. 9, lines 40-46, as allegedly disclosing the grouping feature of claim 1, i.e., grouping sorted pixels into groups in which a difference in intragroup color distance is minimum and a difference in intergroup color distance is maximum, but Applicant disagrees. Specifically, col. 9, lines 40-43, of Young discloses that a distance function is calculated between a reference color and each color parameter triplet in a source file, and in a following step of Young's method, the resultant pixel index reference terms are ordered from least to greatest distance in color space. In other words, the reference describes ordering pixel index reference terms, but does not disclose grouping sorted pixels. Furthermore, there is no teaching or suggestion of a minimum difference in intragroup color distance and a maximum difference in intergroup color distance for grouping sorted pixels. Therefore, claim 1 is not anticipated by Young, for at least this reason.

For analogous reasons, Applicant submits that claims 19, 39, and 45 are not anticipated by Young.

Claims 2, 20, 21, 44, and 50 are allowable over Young, at least because of their dependence from claims 1, 19, 39, and 45, respectively.

Regarding claim 38, Young fails to teach or suggest defining a window having a predetermined size within an input color image. The Examiner refers to FIGS. 6A and 6B, as allegedly disclosing this feature of the claim, but Applicant disagrees. According to Young's disclosure, "FIG. 6A is a standard representation of Munsell color space 40 which is a cylinder which has polar coordinates (radius Y and angle X) and height Z. FIG. 6B is a trajectory 42

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through the Munsell color space 40." Col. 9, lines 58-61. In other words, FIGS. 6A and 6B show Munsell's mathematical coordinate system (space) for assigning numerical values to colors. However, neither the figures nor the specification appear to disclose defining a window having a predetermined size within an input color image. Hence, claim 38 is not anticipated by Young for at least this reason.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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